

STATE OF CALIFORNIA

**ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:)	Docket: 99-AFC-2
)	
Application for Certification of the)	OPENING BRIEF OF
Three Mountain Power Project)	COMMISSION STAFF
_____)	

I. AIR QUALITY

A. Background

Burney, and the geographical basin within which it lies, is in the northern part of the Sacramento Valley Air Basin. (Exh. 64, p. 22.) The Shasta County Air Quality Management District (District) is designated as attainment for federal ozone, CO, and PM10 standards, and unclassified for federal NO2 and SO2 standards. (*Ibid.*) The District is attainment for state NO2 and SO2 standards, but non-attainment for state PM10 and ozone standards. (*Ibid.*) The District has the same boundaries as Shasta County. (*Ibid.*)

The Burney basin lies above the Sacramento Valley floor, and is not expected to receive significant transport of pollutants from the Sacramento Valley. (AFC, p. 6.8-5.) Ambient air monitoring data for criteria pollutants in Burney is limited to the years 1988-1993. (Exh. 73 (FDOC), p. 20.) That monitoring indicated that there were no violations during those years of the state's ambient air quality standards with the exception of the state PM10 standards. (Exh. 64, pp. 24-25; Exh. 73, p. 20.) The state annual PM10 standard was violated only in the year of 1993, but violations of the state 24-hour PM10 standard occurred in each year. (Exh. 64, pp. 24-25.) Federal 24-hour and annual PM10 standards were not violated. (*Ibid.*) Burney has not experienced any significant growth in emissions sources, and the 1988-1993 ambient air monitoring data is likely to be representative of current conditions. (Exh. 64, p. 24, 12/18 RT 163, 187-188.)

Burney's PM10 violations occurred primarily in winter months, and the District and staff testified that they are principally the result of wood combustion in wood stoves and fireplaces. (Exh. 64, p. 33; Exh. 73, p. 20.)

B. Offsets and Other Mitigation

Because the project is attainment for all federal standards, no offsets are required under EPA or California Air Resources Board (CARB) standards. (AFC, p. 6.8-93.) However, the Shasta County General Plan, Policy AQ2-e, requires new projects with stationary sources of emissions of non-attainment pollutants or their precursors that exceed 25 tons per year (TPY) to provide appropriate emissions offsets. (*Ibid.*) Pursuant to this requirement, the applicant was required to provide offsets for ozone precursors and for PM10 to address non-attainment of state standards.

Offsets for ozone precursors were obtained by way of option contract agreements to purchase up to 153 TPY of NOx and up to 65 TPY of VOC emission reduction credits from Sierra Pacific. (Exh. 64, p. 38.) Sierra Pacific banked these offsets for the shut down of equipment in Anderson, 40 miles southwest of Burney. (*Ibid.*)

Offsets for PM10 will be provided by the paving of four county roads and six private roads near Burney. (*Ibid.*) This paving will reduce dust PM10 by a calculated 570 TPY, more than offsetting the project's PM10 emissions of 179 TPY. (*Ibid.*) In addition, staff has proposed (and the applicant has accepted) additional mitigation to address the most serious air quality problem in Burney: wood smoke PM10 during winter months. This mitigation would require the applicant to fund EPA-certified, low-emission wood stoves to replace those of persons using older, uncertified stoves in Burney. (*Id.*, at p. 41.) This voluntary program will replace either 389 or 455 older stoves, depending on which turbine the project uses (the different turbines have different PM10 emissions, and hence justify different levels of emissions reductions). The wood stove program will be on a first come basis and will last for five years, during which time any resident may turn in an older (operating) stove and receive an EPA-certified Phase II stove costing up to \$1225 for both stove and installation. (Exh. 64, p. 42.) A participant can choose a

more expensive stove, but must pay the additional cost him or herself. (Ibid.) Any funds remaining in the program after five years will be devoted to additional road paving. (Ibid.)

The collective mitigation proposed by staff and accepted by the applicant should more than compensate for the PM10 emissions from the project. Wood smoke emissions are a major PM10 source and such emissions occur at the ground level, where inhalation is most likely. (Exh. 72, p.3) Road dust is also a ground level source. The paving and wood stove program should thus result in genuine improvements in Burney air quality that surpass PM10 emissions from the stack of the project. (Ibid.)

C. Issues Raised by Burney Resources Group.

Burney Resources Group (BRG) filed testimony raising several issues regarding air quality. It is notable that the filed testimony bears strong resemblance to testimony filed by Concerned Unions for Reliable Energy (CURE) in a separate proceeding at the Energy Commission for the Elk Hills Power Project. (Compare Exh. 77 with Exh. 77, Appendix B.) The BRG testimony raised the following issues, each of which is addressed below:

1. Project ammonia slip will not result in significant additional PM10.

The foremost issue raised by the BRG testimony is that failure to use the SCONOX emissions control technology means that the project must use ammonia in its catalysts, and that this will result in ammonia emissions that will in turn create significant additional PM10. There are several fallacies in this argument.

First, the BRG testimony greatly overestimates the amount of ammonia slip, estimating 600 pounds per day. (Exh. 77, p. 4.) But 600 pounds per day would be the emission rate if the facility were operating constantly at the very maximum ammonia slip limitation of 5 ppm for the entire day. (12/18 RT 210-211.) In reality, the project is not expected to operate at anything close to the permitted limit. Based on emissions from other similar plants, staff testified that emissions will probably be no more than 0.2 ppm, or four percent of the estimate used by BRG. (12/18 RT 210.)

Second, the BRG testimony assumed that all ammonia emissions will be converted to PM10. (Exh.77, pp. 3-5.) During cross-examination, BRG's witness was unsure whether the estimated conversion had assumed 100 percent conversion, because he had merely adopted the numbers from CURE's witness, but he believed the assumed conversion to be 100 percent. (12/18 RT 256.) However, he admitted that actual conversion is difficult to calculate, that he was aware of no studies supporting a 100 percent conversion rate, that 100 percent conversion was assumed as a worst case, and that the assumption was to get your attention. (12/18 RT 256-258.)

In contrast, staff testified that conversion of ammonia slip to PM10 would be minimal because of the lack of free hydroxide radicals and nitric acid necessary elements for such conversion in the area ambient air. (Exh. 64, p. 35.) Staff estimates that the conversion rate will be not even close to 10 percent in the Burney area because of lack of ozone and NH3. (*Ibid.*) By contrast, 10 to 30 percent conversion rate might be expected in a polluted urban area. (*Ibid.*) The District testified in accord that the ambient air in this vicinity is low in nitric acid. (12/18 RT 164.) Staff's conclusion was that the secondary PM10 from ammonia slip and other sources would be minimal. (Exh. 64, pp. 35-36.)

2. SCONOx should not be required as the control technology for this project.

As the record recited above indicates, project ammonia slip will not be a significant contributor to PM10 in the Burney basin. However, the contention that SCONOx is an available and feasible technology to avoid ammonia use finds no support in the record.

The District issued its PDOC on January 7, 2000. EPA Region IX, in its comments on this PDOC, requested that the District do a top down NOx BACT analysis to determine whether SCONOx should be BACT and required for the project. (Exh. 66, App. 24.) The District performed this analysis, which was contained in the first FDOC issued on June 9, 2000. The District withdrew the FDOC due to concerns about the issuance of the biological opinion by USFWS, but re-issued the FDOC on October 10, 2000 (Exh. 73, pp. 7-12.)

The FDOC emphasizes that pursuant to District rules, BACT is an emissions limit, not a technology. (Exh. 73, p. 12.) The FDOC indicates that SCONOx is not presently available for

large frame gas turbines because 1) it has only been used on small aero-derivative turbines and there is no experience with the scale up application of SCONOx to larger turbines of the type used by the project; 2) the technology remains experimental and unacceptable at this time because of lack of scale up experience, and because there are several identified engineering concerns that have not been resolved for its application to larger turbines; 3) the SCONOx vendor did not provide a complete and responsive proposal to the applicant that would meet the applicant's necessary requirements to purchase and rely on the SCONOx technology; 4) the SCONOx cost effectiveness analysis indicated costs that were clearly above typical thresholds recognized as reasonable criterion levels by the South Coast Air Quality Management District (\$17,000/ton) and the Bay Area Air Quality Management District (\$17,500/ton), and 5) it remains questionable whether emission limitations offered by the SCONOx vendor are achievable without scale-up experience. (Exh. 73, pp. 8-10.)

3. The applicant's proposed offsets are appropriate and were properly banked.

The District is attainment for federal ozone standards, so offsets are not required by federal law. (Exh. 64, pp. 22, 38.) As stated above, because the District is not in attainment for the state ozone standards, offsets are required pursuant to the Shasta County general plan. The applicant obtained its offsets (emission reduction credits, or ERCs) from certificates that are currently registered with the District. (Exh. 73, p. 26.) The ERCs are from Sierra Pacific Industries facilities closed down in Anderson, California. (Exh. 64, p. 38.) BRG's testimony alleges that these ERCs are not appropriate because Anderson is unlikely to contribute to ozone in the Burney area, and that the ERCs in question were not properly banked. (Exh. 77, pp. 19-20.) Both of these contentions are mistaken.

Air district rules do not require that a specific offset in a district bank mitigate a specific pollution source because such one for one mitigation would be virtually impossible to establish, given the uncertainties of geography, wind direction, and location. Moreover, ozone problems are regional problems (12/18 RT 193-194, 224), and the impacts of ozone are frequently distant from the source of ozone precursors. As a result, the strategy of all air districts is to require regional offsets to attenuate a regional problem.

The region that is non-attainment for the state ozone standard is Shasta County. This non-attainment in Shasta County, or the District (same boundaries), is what triggers the requirement for offsets. Although Burney is within the boundaries of Shasta County, the monitoring in Burney indicated no exceedances of the state standard in the Burney basin itself. (12/18 RT 194; Exh. 64, p. 24 [Table 2].) The measured violations were measured in Redding. (AFC, p. 6.8-17.) Thus, even though ozone levels in Burney do not exceed state limits, projects built in the Burney basin must nevertheless be offset. Offsets purchased in the lower Central Valley where violations actually occur, such as those in Anderson, are more effective at mitigating the overall ozone problem than offsets purchased in Burney, where ozone is not an apparent problem. (See 12/18 RT 200.) Temperatures are higher in the lower Central Valley, and ozone is therefore more of a problem there than in Burney. (12/18 RT 226.)

BRG also contends that the Sierra Pacific ERCs should not have been allowed to be banked because the reduction was created prior to the District ERC certificate system. (Exh. 77, pp. 19-20.) This ignores the fact that the District banking rule specifically allowed the acknowledgement of earlier emission reductions that occurred prior to a given cutoff date. (12/18 RT 193 [Kussow].) So the District rules specifically allowed for the Sierra Pacific ERCs. (Ibid. For additional discussion and detail, see Exh. 66, App. 24, pp. 15-16.)

4. The applicant is not required to collect 12 months of weather data for emissions modeling.

BRG's testimony asserts that the weather data used by the applicant to model emissions impacts did not meet federal requirements, and that the applicant was therefore required to collect twelve months of such data to repeat the modeling. (Exh. 77, p.20.) This assertion is incorrect.

BRG's original modeling relied on meteorological data that arguably did not comply with federal requirements. Both CURE and staff raised this issue earlier in the proceeding, and after much discussion with the applicant, the applicant agreed to provide further modeling using extremely conservative worst-case meteorological assumptions. Both the Screen3 and ISCST3 model using were used with such default meteorological data. (Exh. 66, App. 24, p. 14.) The analysis used very conservative scaling factors. (Ibid.) Staff confirmed that this approach was consistent with EPA's guidelines, and further confirmed it by actual discussions with EPA's Region IX air

quality office. (12/18 RT 232-233). The record thus establishes that applicant s modeling was an acceptable alternative to 12 months of site meteorological data.

5. The Hat Creek Project impacts do not combine with those of the power plant project to create significant cumulative impacts.

BRG requested delay of the evidentiary hearings because Shasta County has recently approved a separate project, formally called the East Aggregates Project, but informally known as the Hat Creek Project. The project includes gravel mining and a truck repair facility, and is fully described in a project EIR adopted by Shasta County. (See Eastside Aggregates Project Final EIR, Shasta County, November 2000.)

Each of the witnesses who testified on air quality, with the exception of the BRG witness, testified that they were familiar with the Hat Creek Project and its environmental documents, and that it changed none of their conclusions about the impacts of the power plant project. (12/18 RT 127-128 [Thompson], 157 [Ngo], 158 [Kussow].) Applicant s witness testified that the Hat Creek Project will not generate emissions exceeding cumulative impact thresholds, and will not result in any new or substantially more significant cumulative air quality impacts. (12/18 RT 128.) The Staff witness agreed, describing the Hat Creek Project as a relatively minor source. (12/18 RT 158.) The BRG witness was not familiar with the Hat Creek Project EIR, and did not testify with regard to it. (12/18 RT 273-274.)

II. NOISE

The applicant provided supplemental testimony on Noise because of project alterations to include dry cooling. (Exh. 66, Vol 1.) Staff was dissatisfied with the applicant s noise analysis, and assigned an expert noise consultant, Brown-Buntin and Associates, Inc., to provide an independent survey. (Exh. 67, p. 3.) The staff s independent analysis indicated lower ambient noise levels at the Hathaway residence (the nearest receptor) than applicant s. (Ibid.) Staff considered the change in noise level that would result from the project to be significantly adverse with regard to the Hathaway residence. (Ibid.) Since the noise impact would be significant only at the Hathaway residence, staff proposes mitigation for that residence only in the form of a requirement to provide sound insulation for the residence. (Exh. 67, p.5.) Alternatively, the

Commission could require that the facility further attenuate its noise, but this would be very expensive. (12/18 RT 89-90.)

III. SOILS & WATER RESOURCES AND BIOLOGICAL RESOURCES

A. The Evidence Supports A Finding That The Project s Use Of Water May Cause Significant Reductions In Flows To Nearby Springs.

The Three Mountain project will use up to 950 acre-feet per year (afy) of groundwater for project cooling, pumped from nearby wells. (Exhibit 65, p. 76) 600 (afy) of this water will be dedicated solely to the Three Mountain project, and 350 afy (the amount most recently estimated by the applicant as the historical water use by the adjacent Burney Mountain Project) will be shared by the two projects. (Vol. 1 of Exh. 84, p. 4) In addition, the project will use up to 500 afy of recycled water from the Burney Water District waste treatment plant, which would consume water that would otherwise recharge the aquifer. (Exh. 65, p. 78) Staff testified that there is great deal of uncertainty about how the aquifer will react to the project s consumption of water, due to lack of information about aquifer parameters, groundwater levels, precipitation, and groundwater discharge in the Burney basin. (Exh. 65, p. 86)

Although staff initially drafted a water budget for the aquifer to show the aquifer flows with and without the project, staff soon abandoned such an approach due to the lack of critical data necessary to develop an accurate budget. Instead, staff used studies of two spring systems in the adjacent Hat Creek basin as a model for estimating the project s impacts. These studies reported discharge rates based on daily measurements over a six-year period. (Exhibit 7 to Vol. 1 of Exh. 84, [Rose]) The Hat Creek basin and the Burney basin are hydrologically connected and are similar in many regards. (Exhibit 9 to Vol. 1 of Exh. 84, [Rose]) As a result, staff believes that using the two springs as a model for estimating project impacts is much more likely to indicate the actual effect of drought on the Burney aquifer than a theoretical model that lacks critical pieces of data. (Exh. 65, p. 87)

Staff found that water consumed by human activities causes substantial cumulative reductions in groundwater outflows from springs, especially during extended droughts. Project water consumption would increase human consumption up to five percent. (Exh. 65, p. 101) Based on

the Hat Creek studies, staff estimates that the amount of water consumed by human activities during summer is approximately equal to the amount of water discharging from the basin's springs by the end of the most recent drought (1988 — 1994). Id., p. 102) Staff therefore believes that the five-percent increase represents a significant contribution to cumulative reductions in outflows, particularly during drought conditions.

In contrast, the applicant did not evaluate the cumulative effects of human consumption on discharges from springs and only addressed project-specific impacts. The applicant testified that its water balance approach indicated that the project would create a less than one-percent reduction in flows under both normal and drought conditions. (Vol. 1 of Exh. 84, p. 14). Staff notes that its testimony contains a summary of some of the more significant flaws in that analysis, but does not believe it necessary to restate them in this brief.

B. Although The Reductions In Flow Caused By The Project Could Adversely Affect Endangered And Sensitive Species, Mitigation Agreed To By Staff And The Applicant Will Effectively Mitigate Any Such Impacts.

In its testimony on biological resources, staff evaluated the reductions in flows it identified in its water testimony as being attributable to the project. Staff concluded that these reductions could represent a substantial contribution to a significant cumulative impact. (Exh. 65, pp. 47 — 48) Staff based its conclusion on several factors, including the hydrologic connection between the Burney aquifer and Crystal Springs, which is located in the Hat Creek aquifer and supports one of the seven remaining populations of Shasta crayfish, an endangered species. (Ibid.) In addition, staff cited the fact that reductions in flow will affect springs within the Burney Basin that are potential Shasta crayfish habitat and also support US Forest Service sensitive species, federal species of concern, and state species of special concern. (Ibid.)

In contrast, the applicant testified that the reductions in flow identified in its water testimony (which are considerably smaller than those identified by staff) would not create any significant impacts to sensitive species or the Shasta crayfish in the Burney basin. (Vol. 1 of Exh. 84, pp. 14 — 16) The applicant did not evaluate any impacts to Shasta crayfish populations in Crystal Lake because its water witnesses disagreed with staff's and Dr. Rose's conclusion that Burney Basin and Crystal Lake are likely to be hydrologically connected. (Id., p. 21) However, the applicant

and staff entered into a stipulation acknowledging the uncertainty of predictive analyses of future hydrologic impacts, and agreed that the mitigation recommended by staff for impacts to biological resources is appropriate. (Exh. 79) Therefore, this brief does not contain an extensive discussion of this issue.

Burney Resources group disagrees with staff conclusions, stating that insufficient data is available to determine the likely impacts of the project on water-dependent biota. (Exh. 82) As a result, Burney Resources Group recommends that the project be required to use dry cooling exclusively. (*Ibid.*) Staff disagrees that the mitigation it recommends will not ameliorate any impacts to biota caused by the project's water use. The completion of the barrier studies is critical to the recovery of the Shasta crayfish, as it should result in the design of barriers to the predatory, invasive Signal crayfish. (Exh. 65, p. 50) As a result, this measure should help not only Shasta crayfish living in areas directly affected by the project, but other populations as well. In addition, the study of aquatic and terrestrial mollusks is critical to developing an understanding of these species, including habitat requirements, and size of populations. (*Id.*, pp. 50 — 51) Without that information, no governmental agency charged with protecting biological resources can determine what steps should be taken to conserve these species. Both mitigation measures will effectively ameliorate the impacts created by the project's use of groundwater.

C. The Project Is Likely To Cause Drawdown Which Could Adversely Affect Nearby Wells.

In addition to reduction in aquifer flows, the project's pumping of groundwater could affect nearby wells. (Exh. 65, p. 78) This is because pumping groundwater causes water levels to lower in the immediate vicinity of the pumping. It is possible that the groundwater pumping contemplated for this project could cause drawdown that interferes with the effectiveness of the wells and/or increases the energy costs associated with using the wells. (*Ibid.*) Staff believes that the extent of these impacts will not be known until several site-specific factors are determined, including the local aquifer properties. (*Id.*, p. 79) Therefore, staff's testimony included a recommendation that the applicant conduct site-specific aquifer tests and use the results in a well interference analysis. Such an analysis will indicate the likely impact of the project on nearby wells.

In contrast, the applicant presented an analysis of drawdown impacts, and concluded that the project would not cause a significant impact on nearby wells. However, the applicant also agreed to conduct aquifer tests in order to recalculate drawdown impacts using the actual aquifer parameters. Staff expects that this analysis will be much more accurate than that referenced in the applicant's testimony.

D. The Staff's Proposed Mitigation For Pre-Compensation Pumping Is The Only Proposal In The Record That Ensures That The Project Will Not Create Or Contribute To Significant Water Impacts.

As was discussed at the hearings, mitigation is necessary to prevent the possibility of significant adverse water impacts due to drawdown. The parties agree that the implementation of SOIL & WATER 12 and 13 will effectively mitigate any such impacts, provided the project does not pump water for cooling purposes until after the compensation package included in those conditions has been made available to well owners for 60 days.¹ However, the parties disagree about the appropriate mitigation for any drawdown impacts that may occur if the project pumps water for cooling purposes before that time.

Originally, staff had recommended that the project be required to complete the aquifer tests and the well interference analysis (which are necessary to determine the aquifer characteristics and hence the project's impacts on nearby wells) far enough prior to operation of the project that mitigation for any impacts the tests reveal would be implemented by the time operation begins. However, one of the requirements for the aquifer test is that the water pumped during the test be stored, as any water disposed of on the ground will percolate into the aquifer and render the test results invalid. (Exh. 80, p. 5) Unfortunately, there may not be sufficient storage available at the time the test is conducted.²

¹ SOIL & WATER 12 and 13 require the applicant to provide compensation consisting of well and bowl modifications and possibly replacement wells for all wells that the well interference analysis indicates will experience a drawdown of two feet or more. In addition, the owners of any such wells used for commercial, agricultural, municipal, or industrial purposes shall be eligible to receive compensation for increased energy costs due to project impacts. (Exh. 80, pp. 8 — 10)

² The Burney Water District (BWD) is planning to construct a 4million-gallon tank, which should hold all of the water pumped during the aquifer test. However, this tank may not be completed until after the project begins operation. Staff encouraged the applicant to work with BWD to see if that work could be expedited. Of course, if the applicant assumes a greater role in construction of the tank, the Commission may have an obligation to evaluate the environmental impacts of the tank as part of this project.

Due to this situation, the applicant proposed the option of delaying the aquifer test until the project is operational in order to dispose of the water in the wet cooling system. Staff considered this proposal, and indicated in its testimony that it is acceptable, provided that the specific capacity test, which will be conducted prior to the aquifer test, demonstrates that drawdown in the project well is less than five feet. (*Id.*, p. 6) Staff also indicated that in the event that drawdown is equal to or more than five feet, there is a greater likelihood that nearby wells will be adversely affected by project pumping prior to the time that permanent mitigation is implemented. (*Ibid.*) These impacts could include well users losing their water supply, and destroying their pumps. (12/19 RT 95)

Although at the time it filed its testimony, staff believed that five feet was a reasonable number, we were convinced by the testimony of Mr. Hathaway that two feet is a better trigger to use in this instance. (12/19 RT 121 — 122) As a result, staff believes that the Committee's Proposed Decision should limit project operation to dry cooling only prior to availability and review of the compensation package in the event the specific capacity test indicates drawdown of two feet or more. This measure is necessary because although the specific capacity tests will have indicated a likelihood of significant well impacts, there will be no way to determine which wells will experience impacts or the extent of those impacts until the well interference analysis is completed. In fact, impacted wells could go dry as a result of the project's pumping for cooling during the time that the well interference analysis is being completed. (12/19 RT 95) Staff believes it is appropriate to ensure that nearby residents will not suffer well impacts before they have had an opportunity to finalize an agreement with the applicant to modify or replace wells to accommodate the project's impacts.

E. The Applicant's Alternative Mitigation Proposal Should Be Rejected By The Commission As Vague And Ill-Defined.

There appears to be no dispute that the mitigation measures proposed by staff would mitigate the potential impact of drawdown from project pumping of water. The only dispute is whether staff's proposal should be implemented, or whether the Committee should instead accept the applicant's alternative mitigation should it be necessary prior to implementation of SOIL & WATER 12 and 13. At the hearing, the applicant stated that staff's proposal to limit the project

to dry cooling until SOIL & WATER 12 and 13 are implemented would probably render the project financially infeasible. (12/18 RT 137), and offered instead to upon receipt of notice, mitigate by providing alternative water supply to a well owner until the permanent mitigation and be selected and implemented. (12/18 RT 63)

While such an approach is appealing in its simplicity, the record is clear that the applicant's proposal lacks sufficient detail for the Committee to find that it can effectively ensure that well impacts will not occur. Staff identified a number of uncertainties about the effectiveness of the proposal, including the fact that no information was provided about how quickly water would be supplied, how much would be supplied, or even whether enough water would be available to supply affected well owners. (12/19 RT 107, 118) In addition, even the applicant testified that it didn't have a proposal for how to identify which well owners who claim impacts would actually be eligible for replacement water. (12/18/ RT 159 — 160)

One of the requirements of the California Environmental Quality Act (CEQA) is that the environmental analysis identify measures to minimize any identified adverse impacts. (Pub. Resources Code / 21100 (b)(3)) The CEQA guidelines also state that [f]ormulation of mitigation measures should not be deferred until some future time. (Cal. Code Regs., tit. 14. / 15126.4(a)(1)(B) Yet that is exactly what the applicant has proposed. It has acknowledged that pumping water prior to implementation of SOIL & WATER 12 and 13 may cause drawdown in nearby wells, but has not determined how to identify those impacts, who it will find eligible for replacement water, how much water it will provide, or even demonstrated that there is sufficient water available to mitigate the impacts. In short, the applicant is asking the Commission to approve a project that may create a significant impact without identifying a feasible mechanism to mitigate that impact. Without some evidence of how the mitigation proposed by the applicant would work and how effective it would be, the Commission cannot find that it is sufficient to mitigate the potential drawdown impact identified in staff's analysis.

There are some 35 wells within a 2-mile radius of the project wells. (12/19 RT 147) In addition, there are two large agricultural water users potentially within the zone of impact. (12/19 RT 120) Although the list of wells was not entered into the record, staff believes that this number includes

several municipal and industrial wells. We also note that the domestic wells that make up the majority of those within the potential zone of project impacts are particularly susceptible to damage and loss of supply due to declines in water levels. Staff urges the Committee to adopt staff's recommendation that the project operate using dry cooling should the specific capacity tests indicate that well impacts are likely and the applicant wants to begin operation prior to implementation of permanent mitigation. Failure to do so will create a risk that members of the nearby community could experience destruction of their pumps and loss of their water supply for an indefinite period of time. This is an unacceptable outcome, and mandates adoption of staff's proposal, which would ensure that these impacts would not occur in the first place.

Dated: _____

Respectfully submitted,

DICK RATLIFF
CARYN HOLMES
Attorneys for Energy
Commission Staff
1516 Ninth Street, MS-14
Sacramento, CA 95814